

Amendments to the Claims

The following listing of claims replaces all prior versions of the claims and all prior listings of the claims in the present application.

Claims 1-42 (canceled)

Claim 43 (currently amended): A carcass structure for a tyre for a two-wheeled vehicle, comprising:

at least one carcass ply comprising ~~at least~~ a first series of strip sections and at least one second series of strip sections circumferentially distributed in a mutually-alternated sequence around a geometric rotation axis of the tyre;

each of the strip sections comprising longitudinal and parallel thread elements at least partly coated with at least one layer of elastomer material;

each of the strip sections extending in a substantially U-shaped configuration to define two side portions, mutually spaced apart in an axial direction, and a crown portion, extending at a radially-outer position between the side portions; and

a pair of annular reinforcing structures applied against end flaps of the strip sections of the first series and overlapped by end flaps of the strip sections of the at least one second series;

wherein each of the annular reinforcing structures comprises:

an annular anchoring insert, substantially in a form of an annulus, disposed coaxially relative to the carcass structure, comprising one or more elongated elements extending in radially-concentric coils; and

at least one filling body disposed at a radially-outer position relative to the annular anchoring insert.

Claim 44 (canceled)

Claim 45 (previously presented): The carcass structure of claim 43, wherein the crown portions of the strip sections of the first series and the crown portions of the strip sections of the at least one second series are disposed in mutual side-by-side relationship along a circumferential extension of the carcass structure.

Claim 46 (previously presented): The carcass structure of claim 45, wherein the side portions of each strip section of the first series are each partly covered with a side portion of at least one adjacent strip section of the at least one second series at a stretch included between a radially-outer edge of respective annular reinforcing structures and a transition region between the side portions and the crown portion of the strip sections of the first series.

Claim 47 (previously presented): The carcass structure of claim 46, wherein covering of the side portions of each strip section of the first series progressively decreases starting from a maximum value close to the radially-outer edge of the respective annular reinforcing structures until reaching a zero value at the transition region between the side portions and the crown portion of the strip sections of the first series.

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Claim 48 (previously presented): The carcass structure of claim 43, wherein the side portions of the strip sections radially converge in a direction of a geometric rotation axis of the carcass structure.

Claim 49 (previously presented): The carcass structure of claim 43, wherein the strip sections of the first series are disposed according to a circumferential distribution pitch corresponding to a multiple of a width of the strip sections of the first series, or

wherein the strip sections of the at least one second series are disposed according to a circumferential distribution pitch corresponding to a multiple of a width of the strip sections of the at least one second series.

Claim 50 (previously presented): The carcass structure of claim 43, wherein each strip section comprises regions of increased width at areas close to inner circumferential edges of the carcass structure.

Claim 51 (previously presented): The carcass structure of claim 50, wherein the thread elements of each strip section are mutually spaced apart at the regions of increased width.

Claim 52 (previously presented): The carcass structure of claim 43, wherein each of the strip sections comprises a width greater than or equal to 3 mm and less than or equal to 15 mm.

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Claim 53 (previously presented): The carcass structure of claim 43, wherein each of the strip sections comprises greater than or equal to three thread elements and less than or equal to eight thread elements.

Claim 54 (previously presented): The carcass structure of claim 43, wherein the thread elements of the strip sections are disposed according to a mutual distance between centers greater than or equal to 1.5 times a diameter of the thread elements.

Claim 55 (previously presented): The carcass structure of claim 43, wherein the annular anchoring inserts each comprise a single series of radially-superposed concentric coils.

Claim 56 (previously presented): The carcass structure of claim 43, wherein the at least one filling body radially extends from a respective annular anchoring insert, tapering away from the respective annular anchoring insert.

Claim 57 (previously presented): The carcass structure of claim 43, wherein a ratio of a radial extension of the annular anchoring insert to a radial extension of the at least one filling body is greater than or equal to 0.5:1 and less than or equal to 2.5:1.

Claim 58 (currently amended): The carcass structure of claim 43, wherein the at least one filling body comprises a hardness greater than or equal to 48° Shore D at [[23°C]] 23°C and less than or equal to 55° Shore D at [[23°C]] 23°C.

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Claim 59 (currently amended): A tyre for a two-wheeled vehicle, comprising a carcass structure made by a method comprising:

preparing strip sections, each comprising longitudinal and parallel thread elements at least partly coated with at least one layer of a first elastomer material;

laying down and circumferentially distributing ~~at least~~ a first series of the strip sections on a toroidal support, each of the strip sections of the first series extending in a substantially U-shaped configuration around a cross-section outline of the toroidal support to define two side portions, mutually spaced apart in an axial direction, and a crown portion, extending at a radially-outer position between the side portions; and

applying annular reinforcing structures against end flaps of the strip sections of the first series;

wherein formation of each annular reinforcing structure comprises:

laying down one or more elongated elements in radially-concentric coils to form an annular anchoring insert, substantially in a form of an annulus, disposed coaxially relative to the carcass structure;

forming at least one filling body of a second elastomer material;

joining the at least one filling body to the annular anchoring insert at a radially-outer position relative to the annular anchoring insert; and

laying down and circumferentially distributing at least one second series of the strip sections on the toroidal support, each of the strip sections of the at least one second series

extending in a substantially U-shaped configuration around a cross-section outline of the toroidal support, between two strip sections of the first series, to define a carcass ply;

wherein each of the strip sections of the at least one second series defines two side portions, mutually spaced apart in an axial direction and having end flaps overlapping the annular reinforcing structures, and a crown portion, extending at a radially-outer position between the side portions[[],] and

~~wherein the second elastomer material may be the same as or different than the first elastomer material.~~

Claim 60 (currently amended): A tyre for a two-wheeled vehicle, comprising:

at least one carcass ply comprising ~~at least~~ a first series of strip sections and at least one second series of strip sections circumferentially distributed in a mutually-alternated sequence around a geometric rotation axis of the tyre;

each of the strip sections comprising longitudinal and parallel thread elements at least partly coated with at least one layer of elastomer material;

each of the strip sections extending in a substantially U-shaped configuration to define two side portions, mutually spaced apart in an axial direction, and a crown portion, extending at a radially-outer position between the side portions; and

a pair of annular reinforcing structures applied against end flaps of the strip sections of the first series and overlapped by end flaps of the strip sections of the at least one second series;

wherein each of the annular reinforcing structures comprises:

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an annular anchoring insert, substantially in a form of an annulus, disposed coaxially relative to the carcass structure, comprising one or more elongated elements extending in radially-concentric coils; and

at least one filling body disposed at a radially-outer position relative to the annular anchoring insert.

Claim 61 (canceled)

Claim 62 (previously presented): The tyre of claim 60, wherein the crown portions of the strip sections of the first series and the crown portions of the strip sections of the at least one second series are disposed in mutual side-by-side relationship along a circumferential extension of the carcass structure.

Claim 63 (previously presented): The tyre of claim 62, wherein the side portions of each strip section of the first series are each partly covered with a side portion of at least one adjacent strip section of the at least one second series at a stretch included between a radially-outer edge of respective annular reinforcing structures and a transition region between the side portions and the crown portion of the strip sections of the first series.

Claim 64 (currently amended): The tyre of claim 63, wherein covering of the side portions of each strip section of the first series progressively decreases starting from a maximum value close to the radially-outer edge of the respective annular reinforcing structures until

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reaching a zero value at the transition region between the side portions and the crown portion of the strip sections of the first series.

Claim 65 (previously presented): The tyre of claim 60, wherein the side portions of the strip sections radially converge in a direction of a geometric rotation axis of the carcass structure.

Claim 66 (previously presented): The tyre of claim 60, wherein the strip sections of the first series are disposed according to a circumferential distribution pitch corresponding to a multiple of a width of the strip sections of the first series, or

wherein the strip sections of the at least one second series are disposed according to a circumferential distribution pitch corresponding to a multiple of a width of the strip sections of the at least one second series.

Claim 67 (previously presented): The tyre of claim 60, wherein each strip section comprises regions of increased width at areas close to inner circumferential edges of the carcass structure.

Claim 68 (previously presented): The tyre of claim 67, wherein the thread elements of each strip section are mutually spaced apart at the regions of increased width.

Claim 69 (previously presented): The tyre of claim 60, wherein each of the strip sections comprises a width greater than or equal to 3 mm and less than or equal to 15 mm.

Claim 70 (previously presented): The tyre of claim 60, wherein each of the strip sections comprises greater than or equal to three thread elements and less than or equal to eight thread elements.

Claim 71 (previously presented): The tyre of claim 60, wherein the thread elements of the strip sections are disposed according to a mutual distance between centers greater than or equal to 1.5 times a diameter of the thread elements.

Claim 72 (previously presented): The tyre of claim 60, wherein the annular anchoring inserts each comprise a single series of radially-superposed concentric coils.

Claim 73 (previously presented): The tyre of claim 60, wherein the at least one filling body radially extends from a respective annular anchoring insert, tapering away from the respective annular anchoring insert.

Claim 74 (previously presented): The tyre of claim 60, wherein a ratio of a radial extension of the annular anchoring insert to a radial extension of the at least one filling body is greater than or equal to 0.5:1 and less than or equal to 2.5:1.

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Claim 75 (currently amended): The tire of claim 60, wherein the at least one filling body comprises a hardness greater than or equal to 48° Shore D at [[23°C]] 23° C and less than or equal to 55° Shore D at [[23°C]] 23° C.

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